



**UP310®**  
**Plinth render**

**PRODUCT PROFILE**

Fine-aggregate cement plinth render suitable for all situations where high impact resistance is required. Cement render for external plinth areas etc., for application to wall materials of compressive strength class > 6 N/mm<sup>2</sup>, with exception of porous, thermal-insulation masonry. External render for basement walls and base for ceramic tiling.

- mortar group P III to DIN 18550
- premixed dry mortar with cementitious binder
- low-chromate to TRGS (German Technical Regulations for Hazardous Substances) 613
- for indoors and outdoors
- fine-aggregate
- water-repellent
- for manual or machine application
- cement-grey

**TECHNICAL DATA**

(DIN 18550/18557/4108/52617)

Bulk density:	1.7 kg/dm <sup>3</sup>
Tensile bending strength:	5.5 N/mm <sup>2</sup>
Compressive strength:	16 N/mm <sup>2</sup>
Tensile/compressive strength ratio:	0.37
Dynamic elastic modulus:	8300 N/mm <sup>2</sup>
Water vapour diffusion resistance factor μ:	15
Thermal conductivity λ:	0.87 W/(m•K)
Water absorption coefficient:	w < 0.5 kg/(m <sup>2</sup> •h <sup>0.5</sup> )

	Grading	Coat thickness	Coverage kg/m <sup>2</sup>	Coverage m <sup>2</sup> /bag	Coverage m <sup>2</sup> /tonne
<b>UP310</b>	1.0 mm	15 mm	24.8	1.2	40

The above figures are approximate values and may vary according to background type. Preliminary site tests are recommended.

**PREPARATION**

Cover or watertightly mask dirt-sensitive elements. Install netting to protect weather-exposed work surfaces from rain and direct solar radiation. Clean down background to remove dust, dirt or any other matter impairing render bond, using high-pressure water jet or wet sandblasting where necessary. Pre-wet smooth- or rough-formed concrete, calcium silicate brickwork/blockwork, rubble walls, high- or variable-suction masonry if required. Spray on approx. 5 mm full-cover spatterdash coat of MARMORIT DER VORSPRITZER. Allow to dry and set for 2 days.

To concrete or calcium silicate masonry, apply SOCKEL-SM using widely notched trowel and roughen. Allow to dry and set for min. 1 week prior to continuing work.

Where necessary, additionally secure small areas of lightweight woodfibre slab/composite panel or XPS-R insulation board within masonry surfaces and spray on approx. 5 mm full-cover spatterdash coat of MARMORIT DER VORSPRITZER or apply SOCKEL-SM horizontally with widely notched trowel, roughen and allow to dry. With insufficiently strong backgrounds, properly fix wire lathing (Distanet or Armanet®, latter with stand-off anchors) to structural wall fabric, with 10 cm lap at edges.

For self-contained plinth areas of XPS-R board, apply approx. 5 mm coat of SOCKEL-SM with widely notched trowel and roughen. After drying, apply approx. 10 mm coat of UP310, scrape after initial set and allow to dry for min. 2 weeks. Subsequently incorporate scrim reinforcement using SOCKEL-SM. Fix renderwork stop and angle bead true to line in MARMORIT AM300 bedding mortar (rapid-setting cement mortar).

### **APPLICATION**

Set water to approx. 420 ltr when starting up machine, then set to lean mortar consistency. Pre-lubricate hoses with wallpaper paste. For manual application: stir 30 kg bag contents with approx. 5.6 ltr water.

Apply UP310 in a single 15 mm (max. 20 mm) coat, strike off level, embed scrim as required.

For render thicknesses of 20-30 mm, apply in several coats and embed scrim over whole surface in final coat or incorporate scrim reinforcement using MARMORIT SOCKEL-SM at later time. Roughen undercoat(s) and allow to dry and set prior to application of next coat. Remove fins, protrusions and irregularities using lattice plane after initial set.

Allow min. 1 day's drying time per millimetre render thickness prior to continuing work.

Allow plinth render to fully dry out prior to application of mortar group P III coatings such as:

- MARMORIT SOCKEL-SM
- MARMORIT butz colour-aggregate silicone render
- MARMORIT SOCKEL-DICHT elastic sealant
- MARMORIT WP320 exposed-aggregate render
- MARMORIT AUTOL silicone paint finish

### **REINFORCEMENT**

Bed MARMORIT basecoat scrim near surface in basecoat at junctions between different wall materials, over small lightweight woodfibre slab/composite panel or XPS-R board surfaces, diagonally above or below corners of openings, above round arches etc., with 10 cm lap at joints between scrim and 20 cm lap at joints/junctions in composite masonry. Incorporation of scrim reinforcement over whole surface using MARMORIT SOCKEL-SM is recommended for composite masonry, on weather-exposed elevations, for render thicknesses exceeding 15 mm and for felt-floated plinth areas.

Roughen self-contained XPS-R board plinth areas, dust down and apply approx. 5-10 mm coat of SOCKEL-SM. Embed scrim with 10 cm lap at joints. After 3 days drying time, apply a further coat of SOCKEL-SM, strike off level and incorporate a second scrim layer so as to break joint with first layer.

### **PLEASE NOTE**

Rendering works are subject to the requirements of DIN 18550 and DIN 18350 VOB (German Construction Contract Procedures) Part C.

Mix dry mortar only with clean water. Do not use any foreign additives.

Do not apply at air and/or wall temperatures below +5°C. Protect fresh renderwork against frost and premature drying out. To achieve paintable felt-floated plinth finish, always apply in 2 coats.

Overcoat roughened, hardened, fully-reinforced though still moist basecoat with a further approx.

3 mm coat of SOCKEL-SM on following day. Properly felt float after initial set. DER HAFTPUTZ may be used here as an alternative.

For lightweight or thermal-insulation brickwork/blockwork of compressive strength class  $\leq 6 \text{ N/mm}^2$ , use water-repellent SOCKEL LUP lightweight cement plinth render (mortar group P II), incorporating reinforcement as required. After drying out, all rendered surfaces in contact with ground or gravel beds shall be waterproofed/protected against moisture ingress, starting from basement wall waterproof barrier up to approx. 5 cm above ground level, in accordance with DIN 18195.

Alternatively, a 2.5 mm coat of MARMORIT SOCKEL-DICHT may be applied. Cover with nonwoven-faced studded sheet after drying.

### **SAFETY AT WORK**

Mortar exhibits a strong alkaline reaction upon contact with water. Avoid contact with skin and eyes.

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

Once set, the material poses no physiological or ecological hazards.

### **MACHINE/EQUIPMENT**

High-performance rendering machines (e.g. PFT G4/G5 mixing pumps or equivalent)

Stator: D 6-3

Rotor: D 6-3

Mortar hoses: 25 mm dia  
Pumping distance up to 30 m  
No additional equipment required!  
See technical information on render and machine.

### **COMPOSITION**

Binder:  
Portland cement to DIN 1164  
Aggregate:  
Quartz and limestone graded to DIN 4226, 0-1.0 mm  
Admixtures:  
Water-retaining admixtures

### **QUALITY**

The product is subject to continuous in-house and external monitoring to DIN 18557 and carries the RAL Quality Label for premixed dry mortar.

### **DELIVERY FORM/SHELF LIFE**

30 kg paper bags.  
Shelf life 6 months, subject to storage in dry, moisture-protected environment.

### **SUPPLY**

Via Marmorit approved applicators or local distributors

### **NOTE**

This data sheet, which replaces all previous editions, is designed to provide you with advice and assistance. The information presented herein reflects our present state of knowledge. It cannot, however, embody the sum total of good practice, nor incorporate the provisions of all relevant standards, codes of practice and guidelines. These – together with the relevant application rules and guidelines – shall be duly observed by the applicator!

### **TECHNICAL ADVICE**

Information and advice may be provided by our external representatives or the MARMORIT Technical Department

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